Sulp ?

8

2 10

12

CLAIMS

- 1. A method for establishing a secure communication channel between a client and an application server comprising the steps of:
- generating by a ticket service a ticket having an identifier and a session key;
- 4 obtaining said ticket from said ticket service;
- transmitting said ticket to a client over a secure communication channel;
- transmitting said identifier of said ticket by said client to an application server over an application communication channel;
 - obtaining by said application server a copy of said session key of said ticket from said ticket service; and

encrypting communications exchanged between said client and said application server over said application communication channel using said session key to establish said application communication channel as a secure communication channel.

- 2. The method of claim 1 wherein obtaining said ticket from said ticket service further comprises transmitting said ticket to a web server.
- 3. The method of claim 2 wherein transmitting said ticket to a client further comprises transmitting said ticket by said web server.
- 1 4. The method of claim 2 wherein said ticket service resides on said web server.
- 1 5. The method of claim 2 further comprising transmitting by said application server said
- 2 identifier to said web server over a server communication channel.
- 1 6. The method of claim 5 further comprising receiving by said application server said
- 2 response to transmitting said identifier to said web server.

8

9

- 1 7. The method of claim 5 further comprising validating by said web server said identifier
- 2 transmitted by said application server.
- 1 8. The method of claim 7 wherein said validating further comprises confirming by said web
- 2 server that said identifier is received by said web server within a certain time frame relative to a
- time that said identifier was transmitted by said web server to said client.
- 1 9. The method of claim 1 wherein said session key is substantially equivalent to a null
- 2 value.
- 1 10. The method of claim 9 wherein said null value is a constant value.
- 1 11. The method of claim 9 further comprising establishing said application communication channel as a secure communication channel.
 - 12. A method for establishing a secure communication channel between a client and an application server comprising the steps of:

establishing a secure web communication channel between a web browser executing on said client and a web server;

receiving a ticket having an identifier and a session key from said web server over said secure web communication channel; and

transmitting said identifier of said ticket to said application server over an application communication channel to provide said application server with information for obtaining a copy of said session key.

- 1 13. A method for establishing a secure communication channel between a client and an
- 2 application server comprising the steps of:
- receiving a ticket having an identifier and a session key over a secure web
- 4 communication channel;

- transmitting said identifier of said ticket to said application server over an application
- 6 communication channel to provide said application server with information for obtaining a copy
- 7 of said session key; and
- 8 encrypting and decrypting communications transmitted to and received from said
- 9 application server over said application communication channel using said session key received
- over said secure web communication channel to establish said application communication
- channel as a secure communication channel.
- 1 14. The method of claim 13 further comprising requesting a software application over said
- 2 secure web communication channel.
 - 15. The method of claim 13 wherein said identifier is a nonce.
 - 16. The method of claim 13 further comprising using secure socket layer technology to establish said secure web communication channel.
 - 17. The method of claim 13 wherein said ticket is generated by a ticket service.
 - 18. The method of claim 13 wherein said identifier is an application server certificate.
 - 19. The method of claim 18 further comprising using secure socket layer technology to establish said application communication channel.
- 1 20. The method of claim 13 further comprising transmitting a password to said application
- 2 server.

I

- 1 21. The method of claim 13 further comprising receiving said ticket and a remote display
- 2 protocol application over said web communication channel.
- 1 22. A communications system for establishing a secure communication channel comprising:
- a ticket service generating a ticket having an identifier and a session key;

a communications device in communication with said ticket service to obtain said ticket 3 from said ticket service; 4

a client in communication with said communications device over a secure communication channel to receive said ticket from said communications device over said secure communication channel; and

an application server in communication with said client over an application communication channel to receive said identifier of said ticket from said client and in communication with said ticket service to obtain a copy of said session key from said ticket service, said application server and said client exchanging communications over said application communication channel encrypted using said session key to establish said application communication channel as a secure communication channel.

- 23. The system of claim 22 wherein said ticket service resides on said communications device.
- The system of claim 23 further comprising said application server transmitting said. 24. identifier to said communications device over a server communication channel.
- 25. The system of claim 24 further comprising said application server requesting a copy of said session key in response to said identifier.
- 1 26. The system of claim 25 further comprising said communications device validating said
- 2 identifier transmitted by said application server.
- 27. The system of claim 26 wherein said communications device validating further comprises 1
- said communications device confirming that said identifier has not been previously transmitted 2
- 3 by said application server.

5

6

7

8

9

10

11

12

2

- 2 said communications device confirming that said identifier is received by said communications
- device within a certain time frame relative to a time that said identifier was transmitted by said
- 4 communications device to said client.
- 1 29. The system of claim 27 further comprising said communications device transmitting said
- 2 session key to said application server over said server communication channel in response to said
- 3 identifier.

世

- 1 30. The system of claim 27 wherein said server communication channel is a secure
- 2 communication channel.
 - 31. The system of claim 25 further comprising said communications device transmitting additional information to said application server over said server communication channel.
 - 32. The system of claim 31 wherein said additional ticket information further comprises login information of a user of said client.
 - 33. The system of claim 32 wherein said additional ticket information further comprises a name of a software application executing on said application server.
 - 34. The system of claim 22 wherein said communications device further comprises a web server.
- 1 35. The method of claim 22 further comprising said client transmitting a password of a user
- 2 operating said client to said application server.
- 1 36. The method of claim 22 further comprising said ticket service transmitting information
- 2 corresponding to at least one of said client and a user operating said client to said application
- 3 server.